



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/575,934

01/02/2008

Yoram Kosover

91266NAB

7046

1333 7590 08/03/2010
EASTMAN KODAK COMPANY
PATENT LEGAL STAFF
343 STATE STREET
ROCHESTER, NY 14650-2201

EXAMINER

AGGARWAL, YOGESH K

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

08/03/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/575,934	KOSOVER ET AL.	
	Examiner	Art Unit	
	YOGESH K. AGGARWAL	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 16,17,320 is/are rejected.
- 7) ☒ Claim(s) 8-15,18,19 and 21-23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-7, 16, 17 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Shirakawa et al. (US Patent # 7,050,098).

[Claim 1]

A method of correcting signal differences between at least two adjacent parts of a radiation-sensitive sensor (figure 18, 59 and 60 or figure 1, CCD 29), each said adjacent parts containing a contiguous set of radiation-sensitive sites read out through a respective separate electronic processing means (see figure 18, each of the adjacent sensors have different electronic processing means, also figure 1 shows different electronic processing means for adjacent portions of the CCD), said contiguous sets being collinear (figure 18 shows the sensor as being collinear), said method comprising the steps of: increasing the perimeter of the border between said adjacent parts of the sensor read out through separate electronic processing means (col. 11 line 60-col. 12 line 31, figure 3 teach that the rear left and right dummy pixels are transferred after the boundary effective pixel portions so that there is an increase in the perimeter of the border between said adjacent parts of the sensor read out through separate electronic processing means); and using at least one set of adjacent values from each said adjacent parts to compute a correction to be applied to a signal read out of at least one of said adjacent parts (col. 12 lines 32-67).

[Claim 2]

Art Unit: 2622

The method of claim 1, wherein said step of increasing the perimeter comprises shifting said radiation sensitive sites so that at least one of said sites (col. 11 line 60-col. 12 line 31, figure 3 teach that the rear left and right dummy pixels are shifted after the boundary effective pixel portions) located at said border between said adjacent parts will be read out through a different one of said separate electronic processing means than prior to said shift (figure 16 shows wherein all the pixels before shift go through only one output means).

[Claim 3]

The method of claim 1, wherein said step of increasing the perimeter comprises: shifting a first line so that N sites belonging to a first of said adjacent parts are enabled to be read out through a second one of said separate electronic processing mean (figure 3 shows left effective pixel portions corresponding to N sites belonging to a first of said adjacent parts are enabled to be read out through a second one of said separate electronic processing mean) ; reading out said shifted first line through said respective separate means (figure 3 and 18); shifting a second line so that N sites belonging to a second of said adjacent parts are enabled to be read out through the first one of said separate electronic processing means (figure 3 shows right effective pixel portions corresponding to N sites belonging to a first of said adjacent parts are enabled to be read out through a second one of said separate electronic processing mean) ; and reading out said shifted second line through said respective separate means (the rear left and rear right pixels are processed through separate electronic processing means).

[Claim 4]

Art Unit: 2622

The method of claim 3, wherein each said first and second lines has N dummy pixels at each end thereof (see figure 3 wherein there are N dummy left and right front pixels are shifted at each end).

[Claim 5]

The method of claim 1, wherein said computing comprises: comparing each line of pixels to the lines above and below it at least one site of each said adjacent parts that was read out through a different one of said separate electronic processing means; estimating the offset between the values of said adjacent parts of said line; and adding said estimated offset to at least one pixel of one of said adjacent parts of said line (col. 18 line 4-18, See col. 6 lines 33-49 for offset difference between adjacent regions).

[Claim 6]

The method of claim 5, wherein said step of adding comprises: adding an averaged estimated offset of a plurality of lines to at least one pixel of one of said adjacent parts of said line (col. 17 lines 36-65, specifically equation 1 and 3).

[Claim 7]

The method of claim 4, additionally comprising, after each said reading out steps, the step of aligning the two parts of each said read out lines (figure 3 shows the left and right parts being aligned).

[Claim 16]

Apparatus for correcting signal differences between at least two adjacent parts of a radiation-sensitive sensor (figure 18, 59 and 60 or figure 1, CCD 29), comprising: a radiation sensitive sensor having at least two adjacent parts, each said parts containing a contiguous set of radiation

Art Unit: 2622

sensitive sites (see figure 18, each of the adjacent sensors have different electronic processing means, also figure 1 shows different electronic processing means for adjacent portions of the CCD), said contiguous sets being collinear (figure 18 shows the sensor as being collinear), said sensor additionally comprising separate electronic processing means for reading out said respective contiguous sets (see figure 18, each of the adjacent sensors have different electronic processing means, also figure 1 shows different electronic processing means for adjacent portions of the CCD); means for storing at least two sets of signals output from said at least two processing means (figure 1 shows memory 42 and 45, col. 11 lines 49-56); means for computing a desired correction between said at least two stored sets of signals and means for correcting at least one of said sets of signals according to said computed desired correction (col. 12 lines 32-67).

[Claim 17]

The apparatus of claim 16, wherein said means for storing comprise means for aligning said at least two sets of signals output from said at least two processing means (After the signals are stored in memories 42 and 45, the synthesizing circuit 46 would have to align the signals from the left and right sides in order for the image to match the left and right signals so that the image looks without any irregularities to a user).

[Claim 20]

The apparatus of claim 16, wherein said collinear contiguous sets of pixels from said adjacent parts contain at least one dummy pixel on each end of each line thereof (see figure 3).

Art Unit: 2622

Allowable Subject Matter

2. Claims 8-15 and 18, 19, 21-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOGESH K. AGGARWAL whose telephone number is (571)272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571)-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yogesh K Aggarwal/
Primary Examiner, Art Unit 2622